# WASHINGTON STATE DEPARTMENT OF HEALTH OFFICE OF FOOD SAFETY AND SHELLFISH PROGRAMS

#### ANNUAL GROWING AREA REVIEW

**PREPARED BY:** Donald Melvin, Environmental Specialist

**AREA:** Nisqually Reach

**YEAR ENDING:** December 31, 2005

**CLASSIFICATION:** Approved, Restricted, Prohibited

#### **ACTIVITIES IN THE GROWING AREA IN 2005:**

Samples were collected from the Nisqually Reach growing area a minimum of 7 times during the year using the systematic random sampling method. Pollution source identification and correction efforts are on-going in the area. Thurston County Environmental Health is working on on-site system problems in the Luhr Beach area and the Thurston Conservation District continues to work on agricultural issues in the McAllister Creek watershed. DOH completed a routine shoreline survey in 2005. The evaluation identified 132 drainages or discharge points and evaluated 198 developed parcels and eight agricultural sites along approximately fourteen miles of shoreline. No direct impacts to the growing area were identified. Numerous indirect impacts, primarily from shoreline discharges and drainages, were identified. None of these impacted active "approved" shellfish beds. The report listed an indirect impact to the "restricted" area, an indirect impact to an approved area north of the marina closure zone, and an indirect impact to the unclassified portion of the growing area near Mill Bight. The "restricted" area was placed in closed status in August 2005 pending correction of on-site system failures that have been identified by Thurston County Environmental Health staff.

# ANALYTICAL RESULTS OF WATER SAMPLES:

Table #1 summarizes the results of all samples collected from the area. This summary shows that all stations in the area pass the NSSP water quality standard. Stations #231 and #233 are of concern due to elevated bacteria levels.

#### CHANGE IN ACTUAL POLLUTION SOURCES THAT IMPACT THE GROWING AREA:

The 2005 shoreline survey indicates that there are active, unidentified pollution sources in the in the northern end of the growing area.

#### **CLASSIFICATION STATUS:**

	Well within the classification standards
$\boxtimes$	Meets standards but some concerns
	Meets standards but threatened with a downgrade in classification
	Fails to meet classification standards

#### REMARKS AND RECOMMENDATIONS:

Table #1 shows that all stations meet the NSSP water quality standards for approved classification and the area is correctly classified.

# TABLE 1 SUMMARY OF MARINE WATER DATA (SRS)

Growing Area: NISQUALLY REACH

Classification: Approved, Prohibited, Restricted

## From **09/10/2002** To **12/19/2005**

#### FECAL COLIFORM ORGANISMS/100 ML

Station Number	Classification	Number of Samples	Range	Geometric Mean	Est. 90th Percentile	Meets Std.
222	Approved	37	1.7 - 130.0	4.4	19.0	Yes
223	Approved	39	1.7 - 79.0	4.3	19.0	Yes
226	Approved	40	1.7 - 49.0	4.8	18.0	Yes
227	Approved	40	1.7 - 33.0	3.7	13.0	Yes
228	Approved	40	1.7 - 49.0	3.4	12.0	Yes
229	Approved	39	1.7 - 49.0	4.4	16.0	Yes
230	Approved	40	1.7 - 33.0	4.3	17.0	Yes
231	Approved	40	1.7 - 79.0	5.4	25.0	Yes
232	Approved	40	1.7 - 110.0	4.2	18.0	Yes
233	Approved	40	1.7 - 350.0	4.0	20.0	Yes
237	Approved	31	1.7 - 70.0	2.9	10.0	Yes
238	Approved	31	1.7 - 17.0	2.0	3.0	Yes
239	Approved	31	1.7 - 240.0	3.2	12.0	Yes
240	Approved	31	1.7 - 49.0	2.8	8.0	Yes
241	Approved	31	1.7 - 95.0	2.9	9.0	Yes
242	Approved	30	1.7 - 7.8	2.2	4.0	Yes
243	Approved	31	1.7 - 33.0	2.3	5.0	Yes
244	Approved	31	1.7 - 13.0	2.2	5.0	Yes
245	Approved	41	1.7 - 49.0	4.0	15.0	Yes
246	Approved	41	1.7 - 49.0	4.6	18.0	Yes
247	Approved	40	1.7 - 49.0	3.7	14.0	Yes
248	Approved	40	1.7 - 79.0	3.0	9.0	Yes
250	Approved	31	1.7 - 170.0	3.7	16.0	Yes
251	Approved	31	1.7 - 79.0	2.9	11.0	Yes
252	Approved	31	1.7 - 11.0	2.0	3.0	Yes
253	Approved	40	1.7 - 49.0	4.7	17.0	Yes
224	Prohibited	40	2.0 - 130.0	16.7	72.0	No
234	Prohibited	39	2.0 - 240.0	21.8	69.0	No
235	Prohibited	38	1.7 - 170.0	17.7	75.0	No
236	Prohibited	35	1.7 - 240.0	17.2	78.0	No
249	Prohibited	31	1.7 - 31.0	2.3	5.0	Yes
225	Restricted	40	1.7 - 79.0	6.3	30.0	Yes

## All tides information is presented

The standard for approved shellfish growing waters is fecal coliform geometric mean not greater than 14 organisms/100 ml and an estimate of the 90th percentile not greater than 43 organisms/100 ml. The above table shows bacteriological results in relation to program standards.

